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## CLAIMS

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1. A method of controlling the power with which a first station transmits signals to a second station, comprising the steps of:  
transmitting from the second station to the first station a power control command having a given value;  
receiving said power control command at said first station;  
determining from said received power control command a parameter representative of the quality with which the power control command is received at the first station; and  
controlling the power which the first station transmits signals based on the determination step.
  2. A method as claimed in claim 1, wherein in said determining step, the received value of said received power control command is determined as said parameter.
  3. A method as claimed in claim 2, further comprising the steps of comparing said determined received value with a threshold value; determining the given value which was transmitted based on said comparing step; and in said controlling step controlling the power which the first station transmits signals based on the determined transmitted value.
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4. A method as claimed in any preceding claim, wherein said first station is arranged to transmit signals to a plurality of second stations, each of said second stations transmitting a power control commands to said first station.
  5. A method as claimed in claim 3 and 4, wherein the method further comprises the step of selecting one of said determined transmitted values in accordance with a predetermined criteria..
  6. A method as claimed in any preceding claim, wherein said transmitted power control command comprises one of a first value indicating that the power should be increased and a second value indicating that the power should be decreased.

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7. A method as claimed in claim 5 and 6, wherein said predetermined criteria is to select the second value if at least one of said determined transmitted values is the second value.

8. A method as claimed in claim 5 and 6, or claim 7, wherein said predetermined criteria is to select the first value if all of the determined transmitted values are the first value.

9. A method as claimed in claim 6, 7 or 8, wherein said threshold value is between said possible received values representative of the transmitted first and second values.

10. A method as claimed in claim 9, wherein said threshold value is such that one of the transmitted power command values is favoured over the other.

11. A method as claimed in claim 10, wherein first value is favoured over the second value.

12. A method as claimed in any of claims 6 to 11, wherein the first value is +1 and the second value is -1.

13. A method as claimed in claim 12 when appended to claim 2, wherein the threshold value is in the range -0.6 to 0.

14. A method as claimed in claim 13, wherein the threshold value is in the range -.025 and -.30.

15. A method as claimed in any preceding claim, further comprising the steps of receiving at the second station a signal from said first station, determining the strength of the received signal from the first station and determining from the strength of the received signal the power control command transmitted to the first station.

16. A method as claimed in claim 5 or any claim appended thereto, said method comprising the steps of combining the

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received values of said received power control commands, comparing the combined value and the selected value and on the basis of the comparison selecting one of said combined value and the selected value and controlling the power which the first station transmits in accordance therewith.

17. A method as claimed in claim 16 when appended to claim 6, wherein the one of the combined value and the selected value which is closer to representing a predetermined one of said first and second transmitted values is selected.

18. A method as claimed in claim 17, wherein said predetermined one of said values is the second value.

19. A method as claimed in any one of the preceding claims when appended to claim 2, comprising the steps of: outputting a value based on a currently received power control command value and at least one previously received power control value; and comparing said output value and the selected value and on the basis of the comparison selecting one of said output value and the selected value and controlling the power which the first station transmits in accordance therewith.

20. A method as claimed in claim 19, comprising the steps of: summing the currently received power control value with the at least one previously received power control command value; comparing the summed value with a predetermined threshold; outputting the determined received value or if a threshold of the summed value is crossed outputting a default value.

21. A method as claimed in claim 20, wherein the first station is arranged to transmit signals to a plurality of second stations, each of which second stations is arranged to transmit power control commands to said first station, said method further comprising the steps of determining the values of each of said received power control values and selecting one of said determined received values, in accordance with a predetermined

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criteria, to be summed with the at least one previously received power control values.

22. A method as claimed in any preceding claim, wherein said second station is a base station.

23. A method as claimed in any preceding claim, wherein said first station is a mobile station.

24. A method of controlling the power with which a first station transmits signals to a plurality of second stations, comprising the steps of;

transmitting from each of the second stations to the first station a power control command having a given value;

receiving said power control commands at said first station; determining the received values of said received power control commands;

combining the received values of said received power control commands; and

controlling the power with which first station transmits to the second station based on said combined value.

25. A method as claimed in claim 24, wherein said transmitted power control command comprises a first value indicating that the power should be increased and a second value indicating that the power should be decreased, and if the combined value exceeds a given threshold, the power with which the first station transmits to second station is one of increased or decreased and if the combined value is below the given threshold, the power with which the first station transmits to the second station is the other of increased or decreased.

26. A method of controlling the power with which a first station transmits signals to a second station, comprising the steps of;

transmitting from the second station to the first station a plurality of power control commands;

receiving said power control commands at said first station;

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determining the value of said received power control values;  
controlling the power with which the first station transmits to the second station based on a currently received power control command and at least one previously received power control command.

27. A method as claimed in claim 26, comprising the steps of summing the determined value of the currently received power control command with a previously determined value of at least one previously received power control command; comparing the summed values with a predetermined threshold; controlling the power with which the first station transmits to the second station depending on whether or not the threshold is crossed and the determined value of the currently received power control value.

28. A method as claimed in claim 26 or 27, wherein the first station is arranged to transmit signals to a plurality of second stations, each of which second stations is arranged to transmit power control commands to said first station, said method further comprising the steps of determining the values of each of said received power control values and selecting one of said determined values in accordance with a predetermined criteria as the current received value.

29. A method as claimed in claim 28, wherein said transmitted power control command comprises either a first value indicating that the power should be increased or a second value indicating that the power should be decreased, and the predetermined criteria is to select the received value closer to the second value.

30. A method as claimed in claim 27 or any claim appended hereto, wherein if the summed value crosses the threshold and the determined value of the received power is determined to represent a power increase, the power with which the first station transmits to second station is decreased.

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31. A method as claimed in claim 27 or any claim appended thereto, wherein if the summed value crosses the threshold and the determined value of the received power is determined to be represent a power increase, the power with which the first station transmits to second station is decreased and the summed value becomes a reset value.

32. A method for controlling the power which a first station transmits signals to a second station comprising the steps of:  
transmitting from the second station to the first station a power control command;  
receiving said power control command at the first station;  
determining, using a plurality of different methods, power control information from said received power control command; and  
controlling the power with which the first station transmits to the second station based on the determination step.

33. A method as claimed in claim 32, wherein the power control information obtained from one of said plurality of different methods is used to control the power with which the first station transmits to the second station.

34. A method as claimed in claim 32 or 33, wherein one of said plurality of different methods comprises the steps of determining from the received power control command a parameter representative of the quality with which the power control command is received at the first station, said parameter defining said power control information

35. A method as claimed in claim 32, 33 or 34, wherein one of said plurality of different methods comprises the steps of determining the received values of a plurality of power control commands received at said first station from a plurality of second stations, combining the received values of the received power control commands to define said power control information.

36. A method as claimed in claim any of claims 32 to 35, wherein

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one of said plurality of different methods comprises the steps of determining the received values of a plurality of power control commands received at said first station from said second station, providing power control information based the currently received power control command and at least one previously received power control command.

37. A first station which in use transmits signals to a second station, said first station comprising:

means for receiving a power control command transmitted from said second station to said first station, said power control command being transmitted with a given value;

determining means for determining from said received power control command a parameter representative of the quality with which the power control command is received at the first station; and

control means for controlling the power which the first station transmits signals based on the determination carried out by said determining means.

38. A first station which in use transmits signals to a plurality of second stations, said first station comprising:

means for receiving power control commands transmitted from said second stations to said first station, said power control commands being transmitted with given values;

means for determining the received values of said received power control commands;

means for combining the received values of said received power control commands; and

means for controlling the power with which first station transmits to the second station based on said combined value.

39. A first station which in use transmits signals to a second station, said first station comprising:

means for receiving power control commands transmitted from said second station to said first station;

means for determining the values of said received power

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control values:

means for controlling the power with which the first station transmits to the second station based on a currently received power control command and at least one previously received power control command.

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